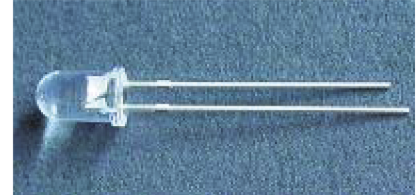


Features

- High efficiency
- Low Power consumption
- General purpose leads
- Selected minimum intensities
- Available on tape and reel
- Pb free



Descriptions

- The series is specially designed for applications requiring higher brightness
- The LED lamps are available with different colors, intensities, epoxy colors, etc
- Superior performance in outdoor environment

Usage Notes:

- When using LED, it must use a protective resistor in series with DC current about 20mA

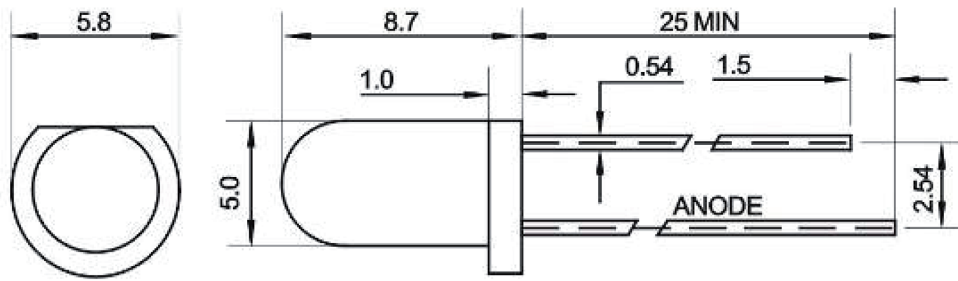
Applications

- Status indicators
- Commercial use
- Advertising Signs
- Back lighting.

Device Selection Guide

	Chip		Lens Color
	Material	Emitted Color	
	InGaN	White	Water clear

Package Dimensions



UNIT:mm

Notes:

- Other dimensions are in millimeters, tolerance is 0.25mm except being specified.
- Protruded resin under flange is 1.5mm Max LED.
- Bare copper alloy is exposed at tie-bar portion after cutting.

Absolute Maximum Rating (T_a=25°C)

Parameter	Symbol	Absolute Maximum Rating	Unit
Forward Pulse Current	I _{FPM}	70	mA
Forward Current	I _{FM}	30	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	140	mW
Operating Temperature	T _{opr}	-40~+80	°C
Storage Temperature	T _{stg}	-40~+100	°C
Soldering Heat (5s)	T _{sol}	260	°C

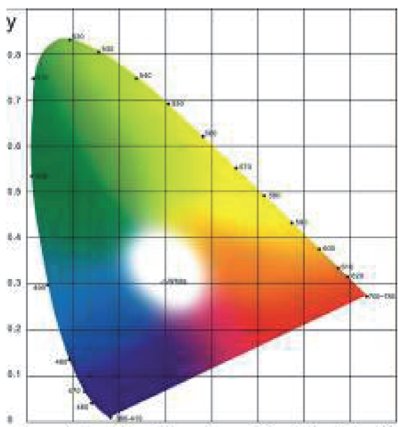
Electro-Optical Characteristics (T_a=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _V	4000	---	6000	mcd	IF=20mA(Note 1)
Viewing Angle	2θ _{1/2}	---	15	---	Deg	(Note 2)
Peak Emission Wavelength	λ _p	---	---	---	nm	IF=20mA
Spectral Line Half-Width	Δλ	25	30	35	nm	IF=20mA
Forward Voltage	V _F	2.9	---	3.5	V	IF=20mA
Reverse Current	I _R	---	---	10	μA	VR=5V

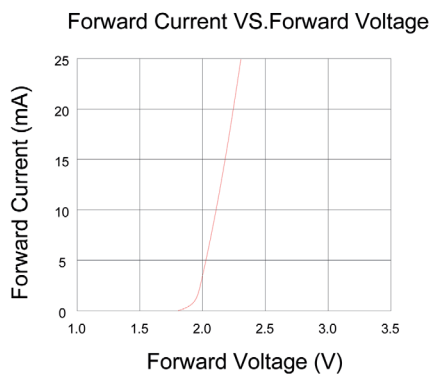
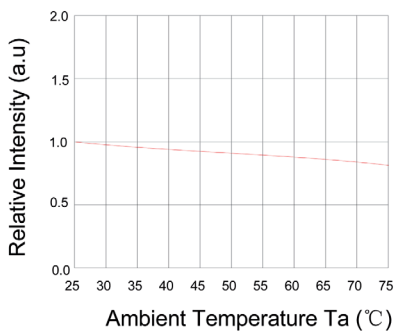
Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

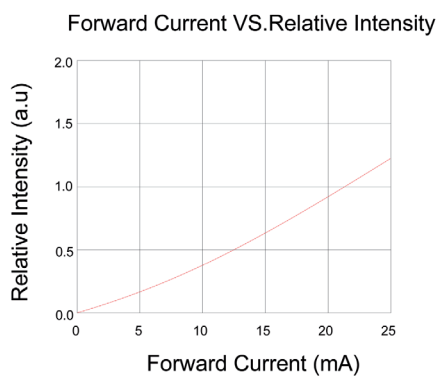
Typical Electro-Optical Characteristics Curves



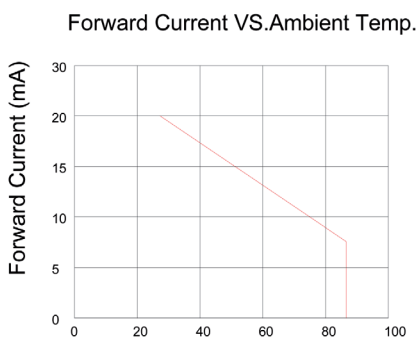
Relative Intensity VS. Ambient Temp



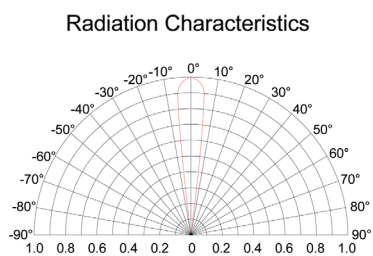
Forward Current VS. Forward Voltage



Forward Current VS. Relative Intensity



Forward Current VS. Ambient Temp.



Radiation Characteristics